Listing of the Claims

1(Currently amended). A method, comprising:

receiving ~~a preamble~~ a framed digital signal having preamble symbols by multiple antennas in a mobile device; ~~and~~

~~sequentially evaluating signals from the multiple antennas to ascertain an antenna providing a higher signal quality than other antennas, wherein the evaluation is based on symbols in the preamble~~ sequentially switching each antenna from the multiple antennas to an input of a receiver in the mobile device to ascertain a signal quality based on preamble symbols processed by the receiver; and

selecting one antenna from the multiple antennas that provides a higher signal quality to be a receiving antenna of the mobile device.

2(Currently amended). The method of claim 1 further comprising: ~~wherein receiving the preamble further comprises:~~

~~receiving a frame that is transmitted by an 802.11 station, where the frame includes the preamble which contains a known training sequence~~ partitioning the multiple antennas by placing the receiving antenna in a first group and the non-selected antenna in a second group;

in subsequent frames, sequentially switching each antenna to process the preamble symbols in the receiver to evaluate the signal quality of the signals received by the multiple antennas; and

replacing the receiving antenna in the first group with a non-selected antenna in the second group that has the higher signal quality.

3(Original). The method of claim 1 wherein sequentially evaluating signals from the multiple antennas further comprises:

demodulating the signals in a single receiver chain to generate quadrature signals; and

comparing the quadrature signals to determine which of the multiple antennas provides the higher signal quality.

4(Original). The method of claim 1 wherein receiving a preamble by multiple antennas further includes receiving the preamble by at least three antenna.

5(Original). The method of claim 1 further including:

comparing the antenna having the higher signal quality with the other antennas, one by one, to dynamically determine the antenna having the higher signal quality.

6(Original). The method of claim 1 further including:

incorporating the multiple antennas with a single receive chain on a Network Interface Card (NIC).

7(Canceled).

8(Currently amended). A method, comprising:

controlling a switch in a transceiver of a mobile device to sequentially provide ~~evaluate~~ signals received by at least three antennas ~~in~~ to an input of a single receiver ~~chain~~ where the signals are symbols in a preamble used to evaluate signal quality.

9(Currently amended). The method of claim 8 further comprising:

evaluating the signals received by the at least three antennas to compare the signals received by the at least three antennas as to the signal quality.

10(Currently amended). The method of claim ~~9~~ 8 wherein evaluating the signals further comprises:

partitioning the at least three antennas by placing the antenna having the highest signal quality in a first group and the remaining antenna in a second group;

in subsequent frames, sequentially switching the at least three antennas to provide the preamble symbols to the single receiver to evaluate the signal quality of the signals received by the at least three antennas;

comparing ~~a first signal received by a first antenna with a second signal received by a second antenna~~ the signal quality of the signals received by the at least three antennas to select the antenna that provides the higher signal quality; and

replacing the antenna in the first group with an antenna in the second group based on the comparison of signal quality.

11-14(Canceled).

15(Currently amended). A system comprising:

a Network Interface Card (NIC) having at least three antennas coupled through a switch to an input of a single receiver ~~chain~~ in a mobile device; and

a processor coupled to the single receiver ~~chain~~ to compare quadrature signals that are demodulated from preamble symbols sequentially received by the at least three antennas, wherein the processor selects an antenna that provides a highest quality signal.

16(Original). The system of claim 15, wherein the preamble signal is received from an 802.11a/b station and the preamble signal includes ten short and two long symbols.

17(Original). The system of claim 15 further including:

a Static Random Access Memory (SRAM) coupled to the processor.

18(Original). The system of claim 15 wherein some of the at least three antenna are placed in a first tier group and others in a second tier group based on the highest quality signal.